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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant	:	Umbaugh
Serial Number	:	10/621,618
Filing Date	:	July 18, 2003
For	:	SEED GERMINATION AND PLANT SUPPORTING UTILITY
Group Art Unit	:	3643
Examiner	:	Parsley, David J.
Date Of Appeal	:	August 8, 2005

APPLICANT'S REPLY BRIEF ON APPEAL
UNDER 37 CFR 41.41

Certificate of Mailing

The Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

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Harold A. Burdick
Name of Applicant, Assignee or Registered Representative

Signature

4-14-06
Date

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OPENING COMMENTS

This brief is submitted in view of the Examiner's added reference (translation of Japanese Patent No. 4-88928) and new grounds of rejection interposed with his Answer dated February 17, 2006. Where no new comments are required, or where no status change has occurred, the headings below, as required under 37 CFR 41.39(b)(2) and 41.37(c)(1), are grouped together with an indication that no change therein from the statements in the Applicant's opening Brief is necessitated. The claims have not been amended herein.

REAL PARTY IN INTEREST

RELATED APPEALS AND INTERFERENCES

STATUS OF CLAIMS

STATUS OF AMENDMENTS

SUMMARY OF CLAIMED SUBJECT MATTER

No changes from Applicant's opening Brief on Appeal.

GROUNDS OF REJECTION TO BE REVIEWED

1) Whether claims 1 through 3, 6, 7, 9 through 11, 13, and 15 through 18 (which include all three independent claims 1, 9 and 15) are anticipated under 35 USC 102(b) by the teachings in the Japanese patent reference No. 4-88928 (including the Examiner's new arguments in support thereof, if any).

2) Whether claims 4 and 5 are unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928 (English language Abstract and Constitution and Drawings thereof) in view of the teachings in U.S. Patent No. 4,057,930 to Barham (including the Examiner's new arguments in support thereof, if any).

3) Whether claims 8, 12, 14 and 19 are unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928 in view of the teachings in U.S. Patent No. 5,225,342 to Farrell (including the Examiner's new arguments in support thereof, if any).

4) Whether claim 20 is unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928 in view of the teachings in U.S. Patent No. 5,225,342 to Farrell and further in view of the teachings in European Patent Application publication

No. 0052264 (including the Examiner's new arguments in support thereof).

5) Whether claims 15 through 18 are unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928.

ARGUMENT

Opening Comments

Applicant withdraws his objection to the primary reference applied in all the specific claims rejections herein (Japanese patent no. 4088928). The translation provided with the Examiner's answer is accepted.

Applicant's statement of the law as set out in his opening Brief on Appeal is reiterated below in this Reply Brief for convenience of the Board of Patent Appeals.

A prima facie case of anticipation under 35 USC 102(b) requires that the reference teach every aspect of the claimed invention either directly or inherently (there is no implication in the Official Actions that the Examiner has relied upon "inherent" features) (MPEP section 706.02; Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051,1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claims (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

A prima facie case of obviousness requires that three criteria be met: First, that some suggestion or

motivation, either in the references themselves or in the generally available knowledge of skilled artisans, to modify the reference or combine the teachings be present; Second, success must be reasonably expected in the combination; and Third, the first two elements must be found in the prior art and not in the Applicant's disclosure (see In re Vaeck, 947 F2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

Moreover, and pertinent here since the drawings of the Japanese Document are so heavily relied upon, drawings are enabling as prior art if they show all of the claimed structural features and how they are put together (Jockmus v. Leviton, 28 F.2d 812 (2d Cir. 1928); MPEP sections 2121.04 and 2125). Such drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art (In re Aslanian, 500 F.2d 911, 200 USPQ 500 (CCPA 1979)). Of course, all such determinations are made at the time the invention was made to avoid impermissible hindsight (W.L. Gore and Associates v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir 1983)).

Applicant continues to feel what is taught by the Japanese document is not analogous to the subject matter at issue. To rely on a reference for rejection of claims

to an invention, the reference must be in the field of endeavor disclosed or reasonably pertinent to the particular problem with which the Applicant's invention is concerned. (In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Herein, the Applicant's invention is concerned with seed germination and plant support within a single utility. The reference, as noted above, is concerned with sprouting and sprout harvesting. This is not a reference which would have commended itself to an inventor's attention in considering the problem of both germination and support in a single utility (In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-1061 (Fed. Cir. 1992)). Application of this reference in this regard is thus traversed.

In this same regard, and in support of the argument that the reference is not analogous, the Japanese document would seem to of necessity teach away from one of the purposes of this invention as claimed, that of root growth stimulation and engagement for purpose of plant support. Such would significantly encumber the ready harvesting of sprouts and cleaning and reuse of the vessels.

Rejection Under 35 USC 102(b)

Claims 1 through 3, 6 and 7

The Examiner has rejected independent claim 1 and dependent claims 2, 3, 6 and 7 in this Application under 35 USC 102(b) as being anticipated by the teachings in the Japanese Patent Document No. JP 04088928 A, and in support thereof repeats the arguments made in the official actions in his Answer on Appeal. Thus, the Applicant's comments in his opening Brief on Appeal remain pertinent to this controversy.

Rejection Under 35 USC 102(b)

Claims 9 through 11 and 13

The Examiner has rejected independent claim 9 and dependent claims 10, 11 and 13 in this Application under 35 USC 102(b) as being anticipated by the teachings in the Japanese Patent Document No. JP 04088928 A, and in support thereof repeats the arguments made in the official actions in his Answer on Appeal. Thus, the Applicant's comments in his opening Brief on Appeal remain pertinent to this controversy.

Rejection Under 35 USC 102(b)

Claims 15 through 18

The Examiner has rejected independent claim 15 and dependent claims 16 through 18 in this Application under 35 USC 102(b) as being anticipated by the teachings in the Japanese Patent Document No. JP 04088928 A, and in

support thereof repeats the arguments made in the official actions in his Answer on Appeal. Thus, the Applicant's comments in his opening Brief on Appeal remain pertinent to this controversy.

The Examiner's answer continues to argue that the mesh has a "diameter" greater than the inside diameter of the spacer 2 and that different mesh sizes are taught. As noted above, this is incorrect as is now fully apparent from the provided translation. The Examiner states that claims 15 through 18 are subject to new grounds of rejections under 35 USC 102(b), yet there is only repetition of the prior statements of rejection. If the new grounds is the statement on page 10 of the Answer that no circular shape of a ring or mesh is taught by the reference, we can only agree that there is no such teaching.

Rejection Under 35 USC 103(a)

Claims 4 and 5

Dependent claims 4 and 5 are rejected under 35 USC 103(a) as being unpatentable over the teachings in the Japanese document cited above in view of the teachings in the U.S. Patent to Barham (U.S. Patent No. 4,057,930). Since the Examiner's Answer merely repeats the rejections of the office actions for the most part, the Applicant

continues to rely upon the comments and arguments made in his opening Brief on Appeal.

As to the new grounds for rejection of claims 4 and 5 under 35 USC 103(a) (more accurately, new argument in support of the prior rejections), the only new statement is that the Japanese reference does not teach a ring shaped of the spacer or mesh having diameters as specified in claim 4 of this Application. The assertion is then made that this structure is obvious over the reference, on the basis that the change could have been made, for aesthetic purposes.

This is no substitute for a teaching (aesthetics is of no concern whatsoever in the teachings of the Japanese patent reference). Moreover, the structure taught by Applicant provides the sole basis for this assertion, and is a clear example of the use of Applicant's teachings to concoct an argument not supported otherwise. Finally, this structure, as taught by Applicant, is not based on aesthetic concerns, but on structural considerations based on the intended use of the utility. The Japanese patent is not concerned with support of the plant roots (they are waste product during harvesting), and thus the particular structure (and shape) are not considered.

Thus, because no prima facie case of obviousness has been made, because these claims are dependent upon allowable claim 1, and because what is specified in these claims is not taught by the applied references, it is felt these claims should be allowed over the references, and reversal of the Examiner's rejection on this restated ground is respectfully requested.

Rejection Under 35 USC 103(a)

Claims 8, 12, 14 and 19

Dependent claims 8, 12, 14 and 19 are rejected under 35 USC 103(a) as being unpatentable over the teachings in the Japanese document cited above in view of the teachings in the U.S. Patent to Farrell (U.S. Patent No. 5,225,342). Since the Examiner's Answer merely repeats the rejections of the office actions for the most part, the Applicant continues to rely upon the comments and arguments made in his opening Brief on Appeal.

As to the new grounds for rejection of claim 19 under 35 USC 103(a) (more accurately, new argument in support of the prior rejection), the only new argument is that, while the Japanese reference does not teach a ring shaped spacer or mesh having diameters as set forth in claim 15 (the independent claim upon which claim 19 relies), such would be obvious. For the same reasons set

forth hereinabove with respect to claim 4 and hereinbelow with respect to claims 15 through 18, this is felt to be in error.

Thus, because these claims are dependent upon one or another of the allowable independent claims, because no prima facie case of obviousness and been made, and because, in any case, what is specified in these claims is not taught by the combined references, it is felt these claims should be allowed over the references, and reversal of the Examiner's rejection (restated and otherwise) on this ground is respectfully requested.

Rejection Under 35 USC 103(a)

Claim 20

Dependent claim 20 is rejected under 35 USC 103(a) as being unpatentable over the teachings in the Japanese document cited above in view of the teachings in the U.S. Patent to Farrell and further in view of the teachings in the EPO Patent Document No. 0 052 264. Again, because the Examiner's Answer merely repeats the rejections of the office actions for the most part, the Applicant continues to rely upon the comments and arguments made in his opening Brief on Appeal.

As to the new grounds for rejection of claim 20 under 35 USC 103(a) (more accurately, new argument in

support of the prior rejections), the only new argument is the same as that described above regarding the ring shaped spacer or mesh having diameters as set forth in claim 15 (the independent claim upon which claim 20 relies, indirectly). For the same reasons set forth hereinabove with respect to claims 4 and 19 and hereinbelow with respect to claims 15 through 18, this is felt to be in error, and reversal of the Examiner's rejection (restated and otherwise) on this ground is respectfully requested.

Rejection Under 35 USC 103(a)

Claims 15 through 18

The Examiner's Answer merely repeats the rejections of claims 15 through 18 under 35 USC 102(b) as set forth in the original office actions is support of this new grounds for rejection, with the exception of the argument that, while the Japanese reference does not teach a ring shaped spacer or mesh having diameters as set forth in claim 15 (the independent claim upon which claims 17 and 18 are dependent), such would be an obvious modification.

For the same reasons set forth hereinabove with respect this same argument as applied in the Examiner's restated grounds of rejection of claim 4, it is felt that

this is in error and that he should be overruled and the claims allowed.

Summary Response to Examiner's Answer

For the most part, the foregoing (or Applicant's opening Brief) addresses the arguments made by the Examiner in his section 10 of the Answer.

However, regarding the recently provided translation, and referring to FIGURES 1 through 6 and the translation beginning at page 5, the Japanese patent document teaches a sprout culturing vessel including a bottom, wherein sprouts are cultured on filter media 5 held in a frame 5a which is placed on support frame 4 (as is quite standard in that particular industry). The media/frame 5/5a lies loosely in the bed 3 (no attachment is taught to either bed 3 or frame 5) as is apparent from the statement of the cultivating vessels function beginning at page 6 of the translation. The inner dimensions of the bottom of frame 2 are larger than the outer dimensions of frame 2 to allow stacking of the vessels as shown in FIGURE 6 (see the top of page 6 of the translation).

While the translation refers to these dimensions as "circumference"'s, this is either a mis-translation or mis-categorization since the vessel frames are

rectangular. Moreover, while the translation refers to the connection between the stacked units (at the top paragraph of page 6), there is no teaching or suggestion of means for connection of one vessel to the next. Indeed, at page 7 of the translation, first full paragraph, it is noted that "fixation" is attained only by stacking one vessel on the next (by which it is means, presumably, that the vessels mounted one to the next remain stabile because of their nesting relationship).

There is no teaching or suggestion in this reference of securement of a mesh at both sides of the frame 2 or of means of any kind for retaining mesh at the ends of frame 2. The mesh frames 2a are merely placed, unsecured, into the bed frame 4 (at the area defined by step part 4d), neither the mesh 5 nor mesh frame 5a even touching the spacer frame 2. Moreover, mesh is taught in this reference for the sole purpose of seed cultivation, the overall vessel being adapted to automated procedures for harvesting cultivated growth and reuse of the frames. Thus, having a mesh layer secured in any case to the frames or bed, much less to the bottoms of frames 2, would be both useless in and contrary to the usage and purposes of the vessels taught by the reference.

The Examiner argues that stacking the vessels 1 teaches securement of mesh at both sides of a vessel 1 in the middle of the stack. The Examiner's argument would apply if a screen were placed on the ground and one of the vessels 1 of the Japanese patent reference were to be set atop the screen. Yet it is clear that this would not constitute a securement of mesh to frame 2 at the top and bottom. No less is this true of the stacking of multiple vessels 1 without more.

Aside from the fact that, as pointed out hereinabove and as taught in the Japanese patent, there is no interconnection of vessels 1 when stacked, the mesh in the Japanese patent is not secured to the frame 2 (spacer) in any way, as is specified by the independent claims in this Application. The Examiner's arguments to the contrary are not understood or are felt to be a misinterpretation of the drawings in the Japanese patent reference. The presence of retainers (Applicant's independent claims 9 and 15 and dependent claim 5) securable to the spacer is not even suggested by the teachings in the reference, nor does the Examiner's answer clearly address this issue.

Furthermore, there is no teaching <u>or suggestion</u> in the reference that a ring shaped frame 2 would be useful,

aesthetically or otherwise. It is thus difficult to understand the Examiner's comments in this regard and the off-hand rejection based thereon, without teaching of any kind, is felt to be erroneous under the patent laws.

CLAIMS APPENDIX (Reiterated)

The following are the claims involved in this appeal (all rejected claims):

1. A seed germination and plant supporting utility comprising:

a spacer having a central opening therethrough between first and second sides of said spacer; and

mesh secured on both of said sides of said spacer, wherein said mesh is held spaced apart a selected distance by said spacer and enshrouds said central opening, said mesh having mesh openings of a size small enough to directly support a seed thereon at said first side of said spacer and to be securely engaged by plant root growth therethrough at said second side of said spacer.

2. The utility of claim 1 further comprising a first retainer associable with said spacer at one of said sides thereof for holding said mesh thereat.

3. The utility of claim 2 further comprising a second retainer associable with said spacer at another of said sides thereof for holding said mesh thereat.

4. The utility of claim 1 wherein said spacer is ring shaped having an inside diameter and outside diameter, wherein said mesh includes first and second

fiber swathes each with a diameter greater than said inside diameter of said spacer and each positioned at a different one of said sides of said spacer.

5. The utility of claim 4 further comprising first and second removable retainer rings each receivable over a different one of said sides of said spacer and holding said fiber swathes thereat.

6. The utility of claim 1 wherein said mesh at one of said sides of said spacer has a mesh size greater than mesh size of said mesh at another of said sides of said spacer.

7. The utility of claim 1 wherein said spacer includes first and second spacer components each defining a part of said central opening and with each having a different one of said sides of said spacer thereat, said first and second spacer components each having an interfacing surface configured to abut one another and surrounding said central opening spaced from said different one of said sides thereat, said mesh also maintained between said interface surfaces.

8. The utility of claim 1 further comprising a maintenance platform having an opening therethrough for receiving and locating said spacer and said mesh when assembled.

9. A seed germination and plant supporting utility comprising:

a first spacer having a passageway therethrough between first and second ends of said first spacer;

a first mesh swathe positioned at said first end of said first spacer and having mesh openings of a size small enough to directly support a seed thereon, and a second mesh swathe positioned at said second end of said first spacer and having mesh openings of a size small enough to be securely engaged by plant root growth therethrough; and

first and second retainers securable to said first spacer at said first and second ends thereof, respectively, adjacent to said first and second mesh swathes positioned thereat to retain said first and second mesh swathes at said first and second ends of said first spacer, each of said retainers having an opening therethrough in correspondence with said first spacer passageway when associated with said first spacer.

10. The utility of claim 9 further comprising a second spacer having a passageway therethrough between first and second ends of said second spacer, a third mesh swathe positioned at said first end of said second spacer, and a third retainer associable with said second

spacer at said first end thereof adjacent to said third mesh swathe thereat, said third retainer having an opening therethrough in correspondence with said second spacer passageway when associated with said second spacer, said second retainer configured to be associable with both said first and second spacers at said second ends thereof.

11. The utility of claim 10 wherein said first and third retainers each include a retaining lip adjacent to said openings therethrough configured to abut said first ends of said first and second spacers, respectively, to thereby anchor said first and third mesh swathes.

12. The utility of claim 9 further comprising a maintenance platform having an opening therethrough, said first retainer comprising a resilient yet deformable material configured to be securely receivable in said opening through said maintenance platform, and said second retainer comprising a lip at said opening through said maintenance platform.

13. The utility of claim 9 wherein said first and second retainers each include a retaining lip adjacent to said opening therethrough configured to abut a respective one of said first and second ends of said first spacer

when associated therewith to thereby anchor said first and second mesh swathes positioned thereat.

14. The utility of claim 13 wherein said spacer is ring shaped, and wherein each of said first and second retainers are defined by a ring shaped body configured to be fit over a respective one of said first spacer ends, said retaining lip extending annularly from one end of said ring shaped body inwardly at said opening therethrough.

15. A seed germination and plant supporting utility comprising:

a spacer ring having a central opening therethrough between opposite ends of said spacer ring, said spacer ring having an inside diameter adjacent said central opening and outside diameter;

first and second mesh each with a diameter greater than said inside diameter of said spacer ring and each positioned at a different one of said opposite ends of said spacer ring, said first mesh having mesh openings of a size small enough to directly support a seed thereon and said second mesh having mesh openings of a size small enough to be securely engaged by plant root growth therethrough; and

retaining means at each of said opposite ends of said spacer ring for retaining said first and second mesh at said opposite ends of said spacer ring;

wherein said first and second mesh are held spaced apart a selected distance by said spacer ring and enshroud said central opening.

16. The utility of claim 15 wherein said retaining means comprise first and second removable retainer caps having an opening therethrough each receivable over a different one of said opposite ends of said spacer ring and anchoring said first and second mesh thereat.

17. The utility of claim 15 wherein said first mesh has a mesh size greater than mesh size of said second mesh.

18. The utility of claim 15 wherein said spacer ring includes first and second spacer components each defining a part of said central opening and with each having a different one of said opposite ends of said spacer ring thereat, said first and second spacer components each having an interfacing surface configured to abut one another and surrounding said central opening spaced from said different one of said opposite ends thereat, said utility further comprising a third mesh maintained between said interface surfaces.

19. The utility of claim 15 further comprising a maintenance platform having a plurality of openings therethrough, said platform openings for receiving and locating multiple ones of said spacer ring, said first and second mesh and said retaining means when assembled.

20. The utility of claim 19 further comprising a containment and feeding apparatus and a positioning structure, said positioning structure having stations configured to receive said maintenance platform with said openings through said platform exposed from both above and below said platform and said positioning structure, said positioning structure configured to be received at said containment and feeding apparatus with said openings through said platform exposed from below to operations of said containment and feeding apparatus.

EVIDENCE APPENDIX

RELATED PROCEEDINGS APPENDIX

No changes from Applicant's opening Brief on Appeal.

CLOSING REMARKS

In view of the foregoing, it continues to be felt that all of the claims in this Application are allowable, and accordingly, reversal of the Examiner's ongoing and new rejections of these claims, together with an order to pass this Application to issue, is respectfully solicited.

Respectfully Submitted,

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